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science for a changing world

National Geospatial Program Office

USGS Geospatial Activities and Updates

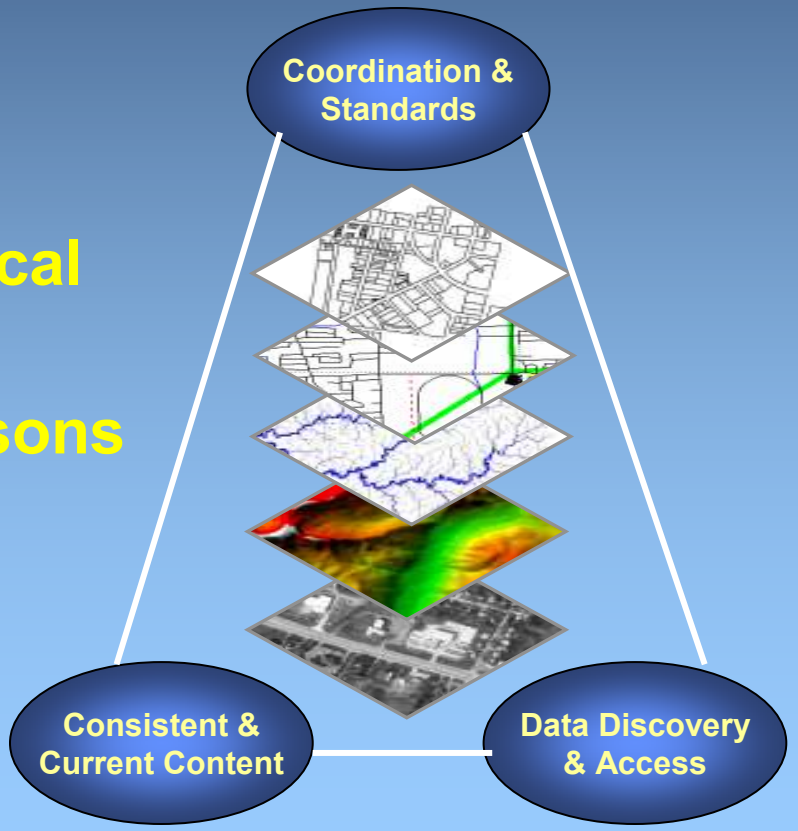
Ron Wencl
USGS Geospatial Liaison
NSDI Partnership Office

North Dakota GIS User Conference
September 13, 2007

U.S. Department of the Interior
U.S. Geological Survey

USGS National Geospatial Activities

- National Geospatial Program Office
  - Federal Geographic Data Committee (FGDC)
  - Geospatial One Stop
  - *The National Map*
  - National Atlas
  - Board on Geographic Names
- National Geospatial Technical Operations Center
- Network of Geospatial Liaisons
  - Other Federal Agencies
  - States



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Changing USGS Roles

- Guarantor of national data completeness
- Catalyst and collaborator for creating and stimulating data partnerships
- Partner in standards development
- Integrator of data from other participants
- Organizer responsible for awareness, availability, and utility
- Data producer and owner when no other source exists

USGS

The National Map Vision

- A seamless, continuously maintained, nationally consistent set of base geographic data that advances the NSDI
- Developed and maintained through partnerships
- Uses data from best available sources
- Consistent with FGDC/NSDI principles
- Products & services available over the Internet
- The source for revised 7 ½ min topographic maps
- Disseminates data to customers in multiple formats
- Improved usability and speed

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Products and Services of *The National Map*

- Data Products
  - National databases of base content
  - Various data holdings of base content
- Graphic Products
  - Legacy topographic maps
  - Standard digital image maps with overlays
  - Standard digital topographic maps
  - Custom topographic maps
- Services
  - Data download
  - Integrated data download
  - WMS, WFC, WCS, replication services
  - OGC catalog
  - Marketplace
  - Status graphics

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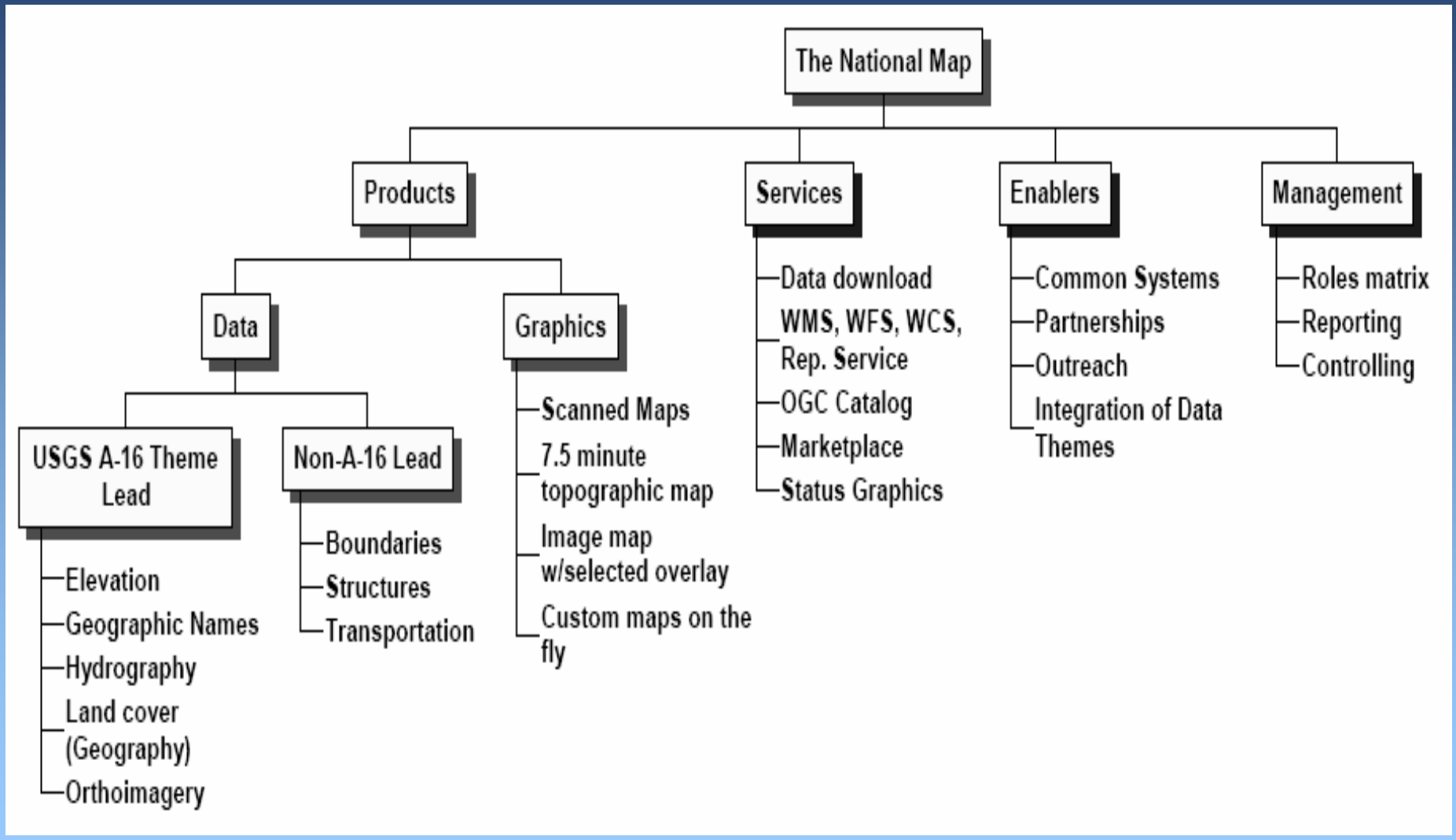
Work Breakdown Structure Chart



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Geospatial Readiness

- Geospatial information and technology support the Nation's ability to perform across the board
  - Before, during, and after natural or man-made hazard events
  - In each component of emergency management
    - Prediction
    - Prevention
    - Mitigation
    - Response
    - Recovery
- Required for successful implementation of the National Response Plan (NRP)
- Key to execution of the National Incident Management System (NIMS) called for in HSPD5

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Lessons Learned: Hurricane Katrina

- Major emphasis on geospatial information coordination, data sharing, and products
- Need for clear roles and responsibilities
  - Across Federal, state, and local communities
  - Between Federal agencies
- Improved geospatial data acquisition and delivery
  - Pre-staged data acquisition
  - Efficient organization and archival of information and products
  - Reliable and efficient data delivery technology and mechanisms
  - Redundancy and failover capabilities
- Enhanced products and services
  - Map product generation from *The National Map* and GOS
  - Maps-on-demand and just-in-time printing

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Geospatial Data Acquisition and Processing

- Partnership between NGA, DHS, USGS, and over 100 state and local partners will put $70+ million of imagery into the public domain
  - Coastal and high-hurricane risk areas; urban areas
  - Leveraging multiple funding and contracting sources
  - Utilizing USGS Geospatial Liaison Network for partnerships and data sharing agreements
  - Publishing plans to Geospatial One-Stop
  - Model of Federal, state, and local cooperation

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Geospatial Data Acquisition and Processing

- Partnerships with state and local government on cataloging and acquiring GIS vector data
- Base Data of *The National Map*
- GIS for the Gulf
- Best Practices Data Model
  - Transportation
  - Structures (hospital, shelter, fire…)
  - Boundaries
  - Hydrography

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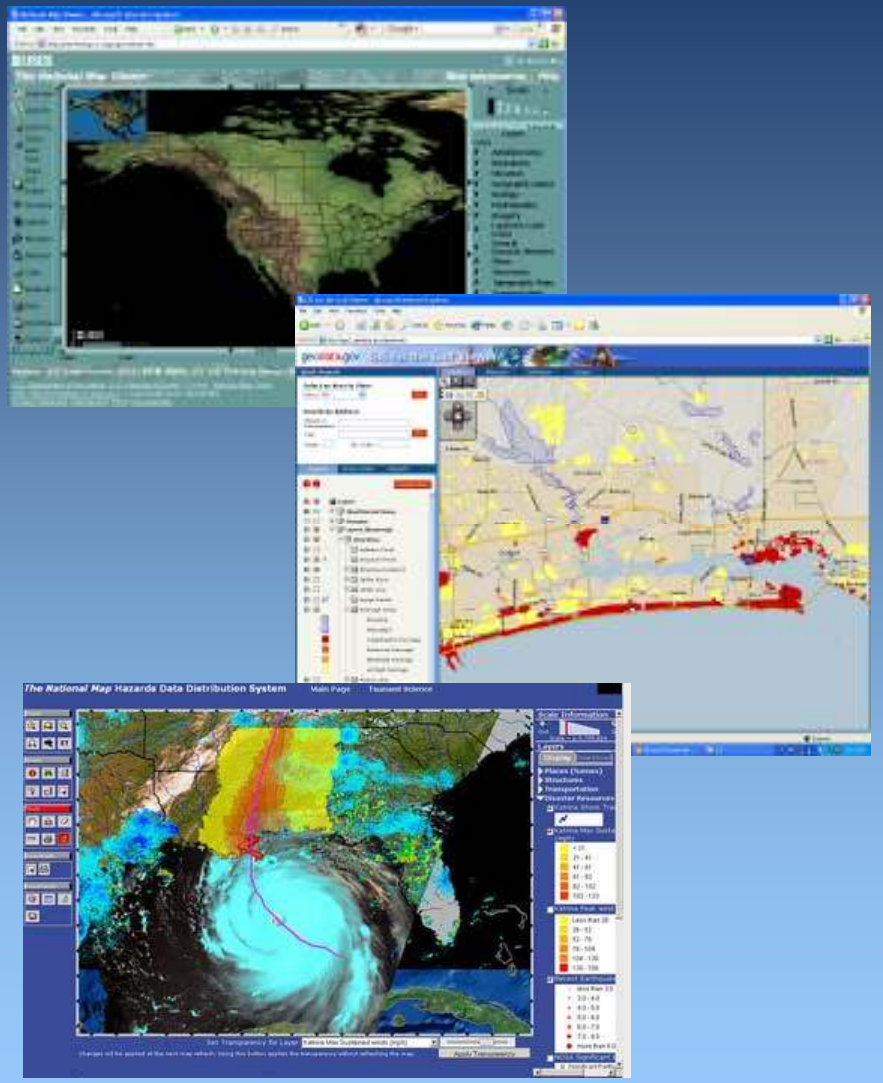
Data Discovery, Access and Delivery

- *The National Map* – Data delivery, download, and updated USGS maps and products
- GIS for the Gulf – Vector (feature) data from State and local sources in a best practices data model
- Hazards Data Distribution System – Managed access for dedicated emergency response support



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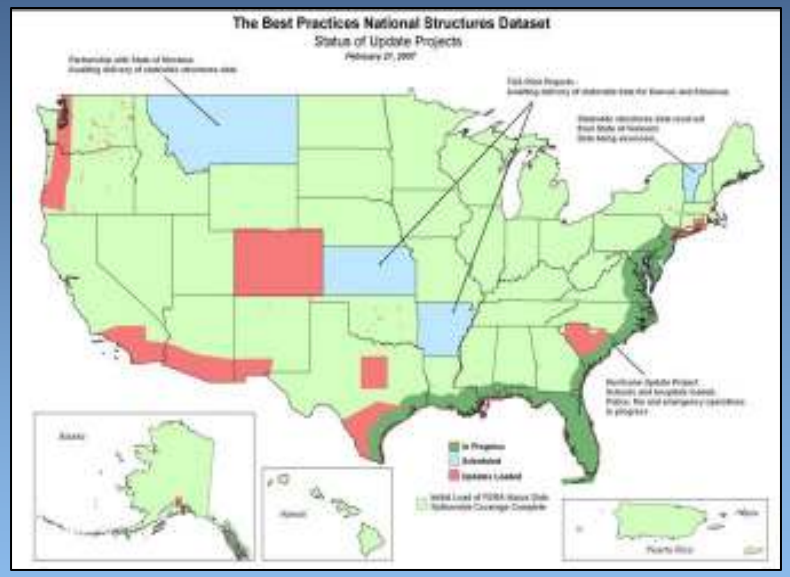
Setting priorities



- East Coast (hurricane)
- Gulf Coast
- High priority geography
  - Urban areas
  - Climate change
  - Energy
  - Emergency ops/response
  - Hazards
  - Fire
- State/local/federal opportunities
- Science (USGS) Strategy focus
- Emergency operations/response
- State by State
- ADS responsibilities
- Partnerships
- Federal lands

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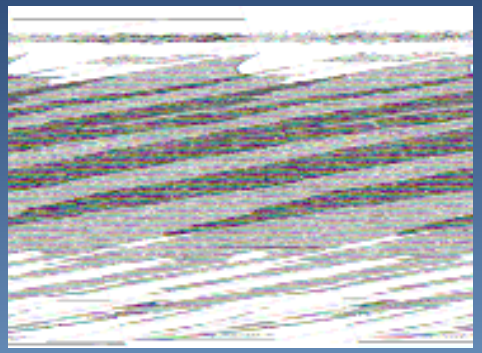
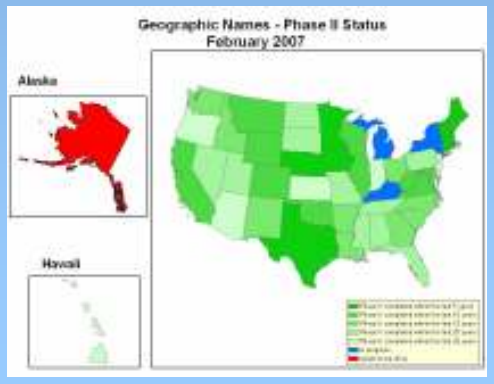
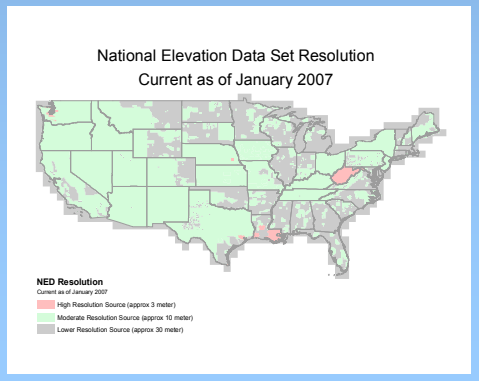
Geospatial Data: Setting Data Priorities







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USGS NGP FY08 Priorities

- Geospatial Line of Business Implementation
- Enhance NSDI
  - Partner engagement
  - Liaison plan for each State
  - Data discovery and documentation
  - Implementation of best practices
  - Feedback from partners about products and services
- *The National Map*
  - Products and services
  - Theme data content
  - Liaison alignment
  - Systems alignment
- NGTOC Transition
- Geospatial Response

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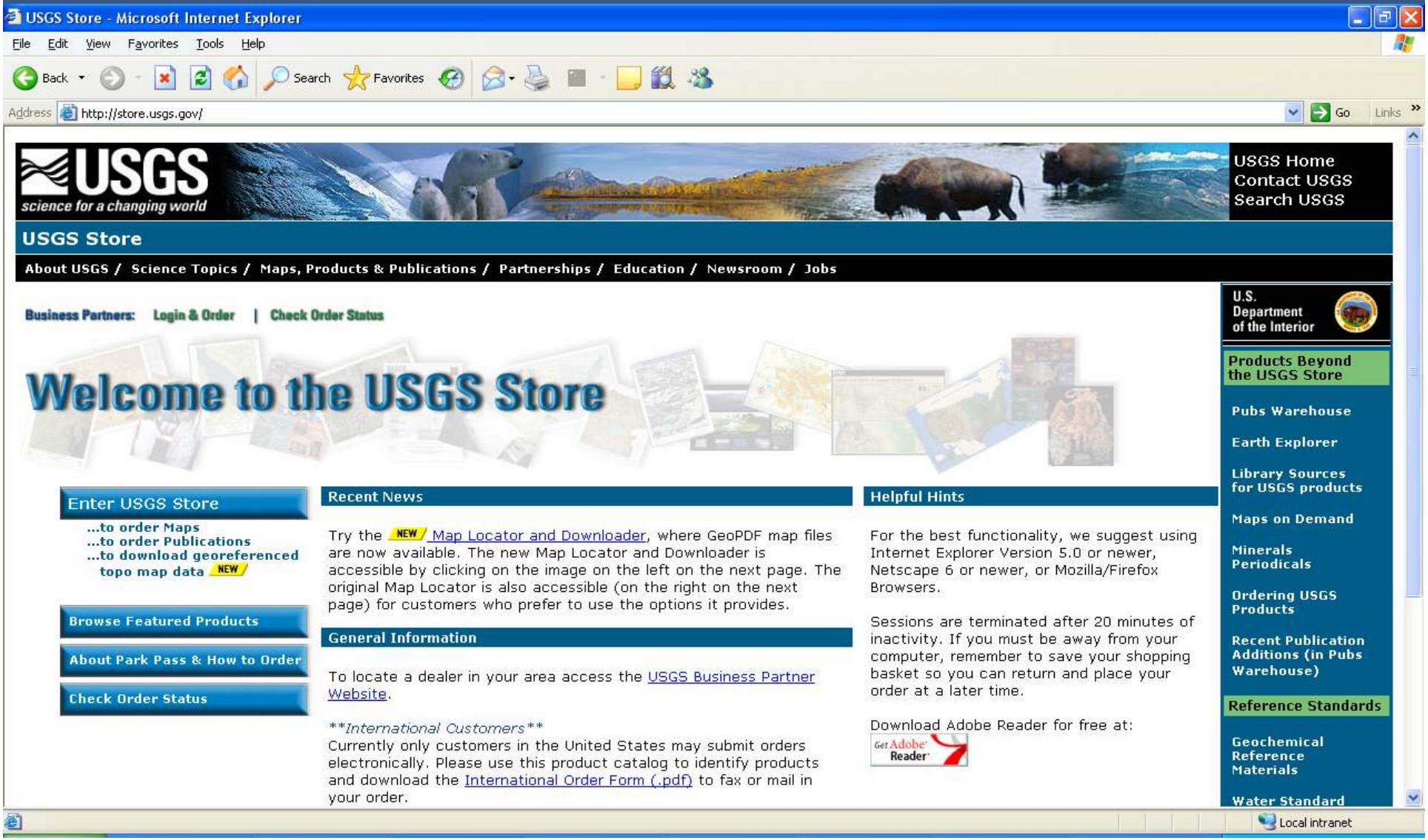
USGS maps in GeoPDF format

http://store.usgs.gov



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1:24,000 - 7.5 Minute Quadrangle

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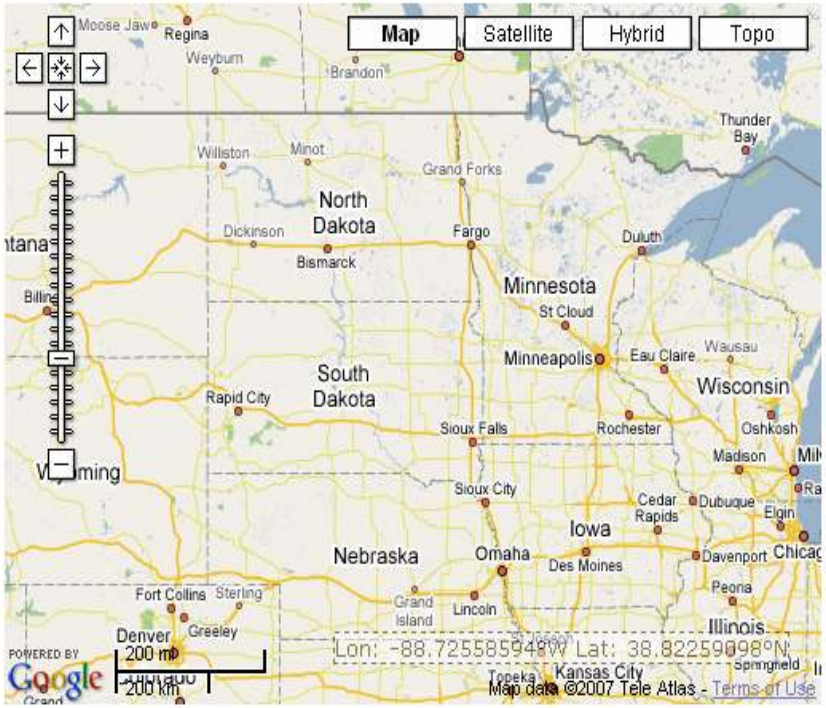

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SEARCH: [Search Help]

Go

OR

FIND A PLACE ON THE MAP [Navigation Help]

FIRST, ◉ NAVIGATE around the map: double click to re-center, click and drag to pull the map around, zoom in and out.

THEN, ○ MARK POINTS on the map: click on a place to add a marker .

NOTES:
You can switch between Navigate and Mark Points at any time.
The following map footprints appear when you are in the Mark Points mode:
7.5 and 15 Minute (must be zoomed in)

STEP 2.

SELECT AND GET YOUR MAPS

FIRST, click on the marker to see an information bubble showing maps available.
THEN, click on "order" and/or "download" to get the maps you want.

GeoPDFToolbar FREE DOWNLOAD

Optional free GeoPDF Toolbar provides more ways to interact with USGS topo maps.

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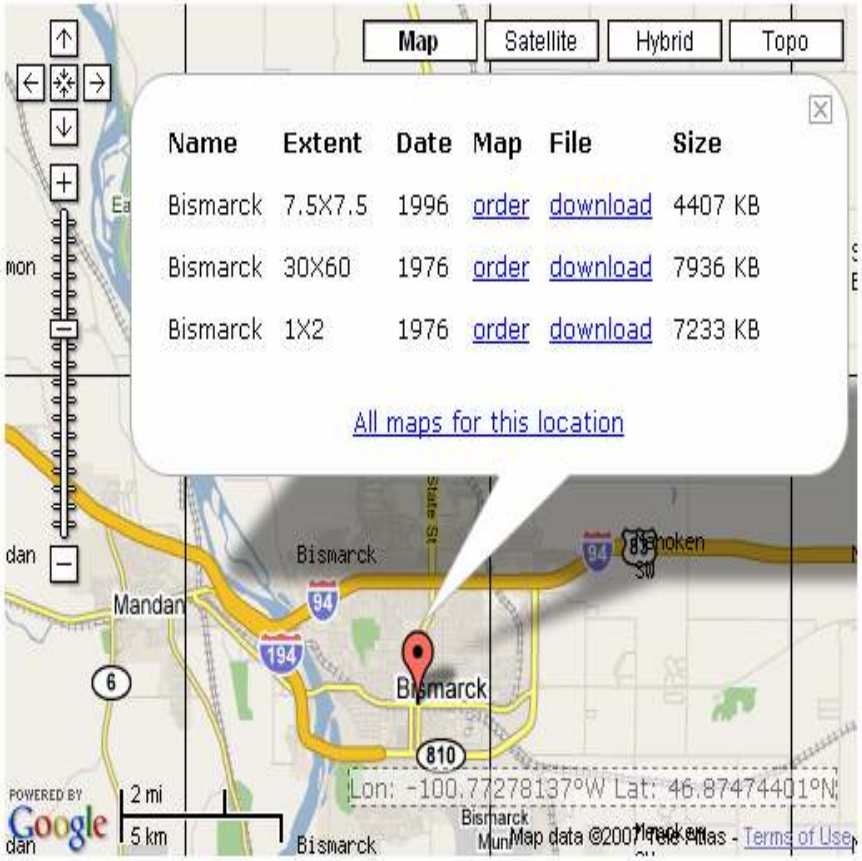

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STEP 1.

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GeoPDFToolbar FREE DOWNLOAD

Optional free GeoPDF Toolbar provides more ways to interact with USGS topo maps.

Imagery for the Nation

- Organized effort to acquire imagery over entire US
- Multi-Resolution (6”, 1’, 1-meter)
- Repeat cycles of 3 to 5 years
- Imagery stays in public domain
- Consistent national standards (image type/quality)
- States can manage part of the program through development of business plans
- Federal government funds program

USGS

http://www.nsgic.org/hottopics/imageryforthenation.cfm

NSGIC

National States Geographic Information Council

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SEARCH

PRINT VERSION

Imagery for the Nation

"Smart & Efficient Government, Good Public Service, and Taxpayer Savings"

June 7, 2007 IFTN Update

The Vision

The Nation will have a sustainable and flexible digital imagery program that meets the needs of local, state, regional, tribal and federal agencies.

Handout Materials

Get the latest brochure for an "official" explanation of the Imagery for the Nation initiative. A poster from the Spring 2006 edition of ArcNews helps to visually describe Imagery for the Nation. Our briefing sheet on the initiative will help you make the right points quickly when working with elected and appointed officials. You can use this slide presentation or its individual slides to give a presentation on the program to your constituent groups. The results of the National Survey are also available for your use in advocating for Imagery for the Nation. The following

NATIONAL STATES GEOGRAPHIC INFORMATION COUNCIL

DIGITAL Imagery for the Nation

An Update

This is the first update in a series of planned bulletins designed to inform you about the current status of the Imagery for the Nation initiative. Many activities are underway, and it's important to provide this information to the geospatial community. They will each be circulated by E-mail and available on the NSGIC web page as they are released.

The Cost Benefit Analysis - "Just the Facts"

Early in 2006, it was apparent that a full cost benefit analysis (CBA) would be required to justify funding for this initiative. The U.S. Geological Survey (USGS) and U.S. Department of Agriculture (USDA) agreed to fund the CBA. USDA managed the contracting and awarded the project to Perot Systems, Inc. in the Fall of 2006. A management team was provided by USGS and USDA to oversee the work of the contractor. That team also includes members of the National States Geographic Information Council (NSGIC).

In-person interviews and detailed surveys were conducted in January 2007 with entities that represent the private sector users, photogrammetric companies, and local, state, and Federal government agencies. In addition to the in-person interviews, information from NSGIC's 2006 IFTN web-based survey was used to provide a more complete picture of the number of orthoimagery acquisition programs and the level of government expenditures. Combining the results of these surveys allowed Perot Systems to project "Current State" expenditures for municipal, county, state and Federal programs. Basing the cost benefit analysis only on the programs actually surveyed is an extremely conservative approach that avoids any inflation in the benefit numbers. This conservative approach is being used throughout the CBA process to ensure that it is regarded as a highly credible document.

Elsewhere in the CBA, the management team is projecting realistic phase-in and acceptance rates for IFTN. IFTN will never meet 100% of the imagery needs of government. Nor will it be accepted by all agencies that could use it's products. The management team has also addressed these facts to ensure that the CBA will be credible.

Western States voice their concerns

The Western Governor's Association wrote to the FGDC and the NDOP Committee in March 2007 to address their concerns over the equity of the program. As originally envisioned, 1-foot imagery would only be acquired over counties with population densities greater than 25 people per square mile. However, a decision was also made to acquire complete coverage East of the Mississippi River since it would be more expensive to stop and start production over these patchwork areas. This resulted in complete coverage of the Eastern states.

This was viewed by the Western states as inequitable and they asked that the initiative include complete coverage for the Western states. During a meeting with approximately 10 Western states in March 2007, they were informed that this would increase the cost of the program to a level that would very likely end any hope for fully funding the program. Two more likely options were explored, including 1-foot coverage of all states (except Alaska) on a three year cycle as 1) a 50/50 cost share program that would require an investment by the statewide councils to trigger production, or 2) federal funding to guarantee that 50% of each state would be acquired every three years. Either of these two alternatives puts all states in an identical situation. They also require

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USDA and USGS Conduct Cost Benefit Analysis Study

- Beginning in October 2006, the U.S. Geological Survey and U.S. Department of Agriculture are jointly funding a comprehensive Cost Benefit Analysis
- The draft results are due in March of 2007 and final deliverables are due in June 2007
- Goal is to Develop a comprehensive Imagery for the Nation (IFTN) Business Case that accurately communicates program goals, objectives, benefits, and other value propositions.

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UNITED STATES DEPARTMENT OF AGRICULTURE

UNITED STATES GEOLOGICAL SURVEY

Imagery for the Nation
IFTN

Business Case Analysis
July 2007

Conducted by
Perot Systems Government Services
8270 Willow Oaks Corporate Drive
Fairfax, VA 22031

USGS

Imagery for the Nation – Cost Benefit Analysis

Executive Summary

Alternative #4 – Original IFTN Concept with Optional 50% Cost Share for 1-ft Program

IFTN with 1-ft coverage of lower 48 states and Hawaii with optional cost share. Federal government will guarantee the availability of 50% funding for coverage according to statewide business plans. Statewide councils can increase funding to increase program coverage.

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Imagery for the Nation

- NDOP – National Digital Orthophoto Program
  - http://www.ndop.gov/

    Cost Benefit Analysis

- NSGIC (National States Geographic Information Council - Hot Topics

  http://www.nsgic.org/hottopics/imageryforthenation.cfm

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“Elevation for the Nation”

National Lidar Initiative Meeting
Feb. 14-16, 2007

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Welcome to the USGS Center for LIDAR Information Coordination and Knowledge

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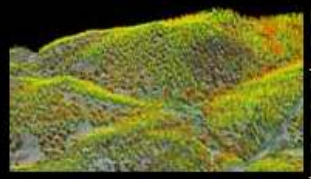
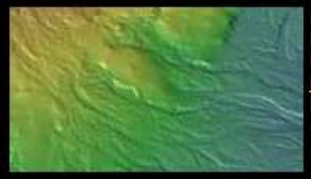
Discrete-return point clouds



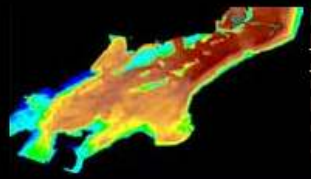
Find out more about discrete-return lidar: See if publicly-available lidar is in your area of interest; ask and answer questions about the data, processing, derivatives and more on our bulletin board; look for articles and other websites about lidar.

Bare Earth



Find out more about the USGS bare earth derivatives from lidar: Go to our National Elevation Dataset (NED) page. NED contains bare earth elevation data created by lidar and other sources.

NASA EAARL



Find out more about NASA's Experimental Advanced Airborne Research Lidar (EAARL) system, and how it is being used. View and download data collected by EAARL- lidar as well as imagery.

http://lidar.cr.usgs.gov

Upcoming Events / Recent Links

View a dynamic calendar of upcoming events on the CLICK Bulletin Board.

View Presentation Material from the National Lidar Initiative Workshop

Mission

There has been increasing demand for research utilizing all information generated from lidar remote sensing data and not just bare earth digital elevation models (DEMs). While this technology has been a proven mapping tool, effective for generating bare earth DEMs,research on using the entire point cloud of this remote sensing data for scientific applications have been slowed by:

- The high cost of collecting lidar
- A steep learning curve on research and understanding involving utilizing the entire point cloud.

The goal of CLICK is to facilitate data access, user coordination and education of lidar remote sensing for scientific needs.

Address http://lidar.cr.usgs.gov/presentations.php

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National Lidar Initiative Meeting

Agenda

Purpose: To foster discussions and organization on the potential of collecting a national baseline elevation dataset and other national derivatives using lidar remote sensing technology.

Wednesday, February 14th, 2007	
Welcome	Barbara Ryan
Goals of the meeting / Overview	Jason Stoker
Louisiana Lidar Discussion	David Gisclair
Pennsylvania Lidar / AASG Discussion	Jay Parrish
Puget Sound Lidar Consortium Discussion	Ralph Haugerud and Craig Weaver
Imagery for the Nation Discussion	George Lee
GPSC Contracting Discussion	Tim Saultz
States Open Discussion	
Poster Session	

Thursday, February 15th, 2007	
USGS Perspective	Jason Stoker
FEMA Perspective	Paul Rooney
USFS Perspective	Hans-Erik Andersen
NRCS Perspective	Steve Nechero
EAARL Coastal Mapping Perspective	Amar Nayegandhi
NOAA Perspective	Kirk Waters
NDEP Perspective	Bryon Ellingson
Army Corps of Engineers Perspective	Eddie Wiggins
Alaska Perspective	Ben Jones
NRC Floodplain Mapping Report: "Base Map Inputs for Floodplain Mapping"	Karen Schuckman / Dave Maune
NASA Perspective	Dave Harding
Lidargrammetry Discussion	Martin Flood
Calibration / QA/QC Discussion	Ayman Habib

Friday, February 16th, 2007	
North Carolina statewide Lidar Discussion	Tonda Sheldon/Gary Thompson / Sarah Wray
Ohio statewide Lidar Discussion	Rob Brinkman

National Digital Elevation Program

BLM

FEMA

USFWS

NASA

NGA

NOAA

NDEP
National Digital Elevation Program

www.ndep.gov

NSGIC

NRCS

USACE

US Census

USFS

USGS

A consortium of agencies coordinating the collection and application of high-resolution, high-accuracy elevation data

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NDEP Goals

- Enhance data sharing among Federal, State, and local agencies; the private sector; and academia;
- Minimize redundant data production;
- Leverage resources to satisfy multiple requirements;
- Develop flexible standards that meet the needs of most users; and
- Ensure the availability and accuracy of digital topographic data.

http://www.ndep.gov

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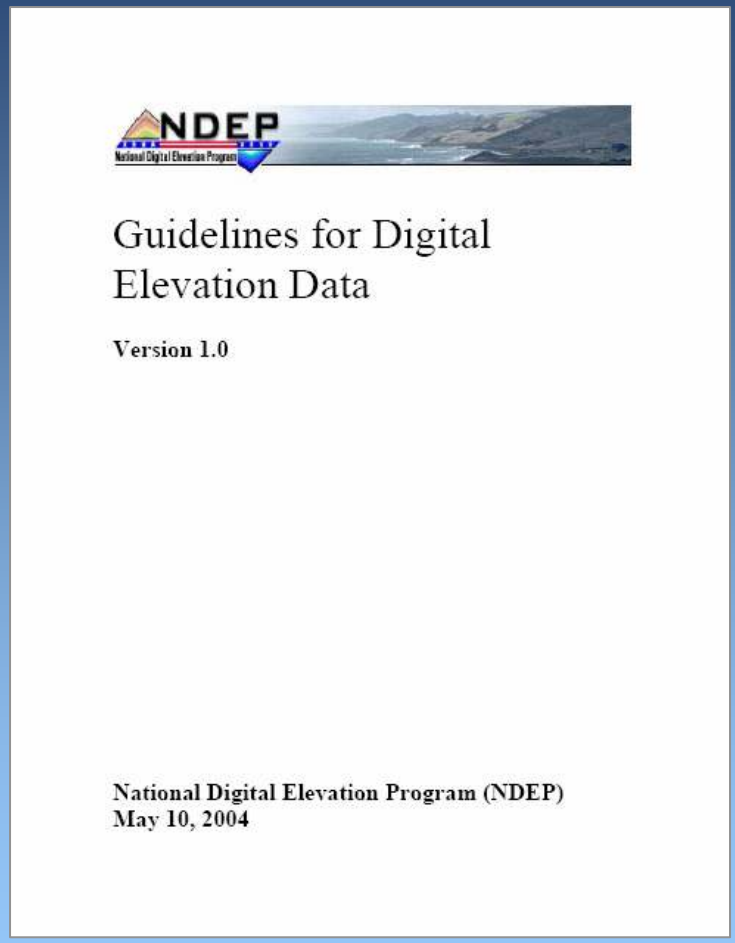
NDEP Guidelines

- "Best practices" document
- Developed by participation from multiple agencies
- Specify vertical accuracy testing and reporting approach in data collection contracts



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Base Map Inputs for Floodplain Mapping

Committee on Floodplain Mapping Technologies
Board on Earth Sciences and Resources
Division on Earth and Life Studies

August 2006-January 2007

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

National Academies Press - http://www.nap.edu/

Base Map Inputs for Floodplain Mapping (Free Executive Summary)
http://www.nap.edu/catalog/11829.html

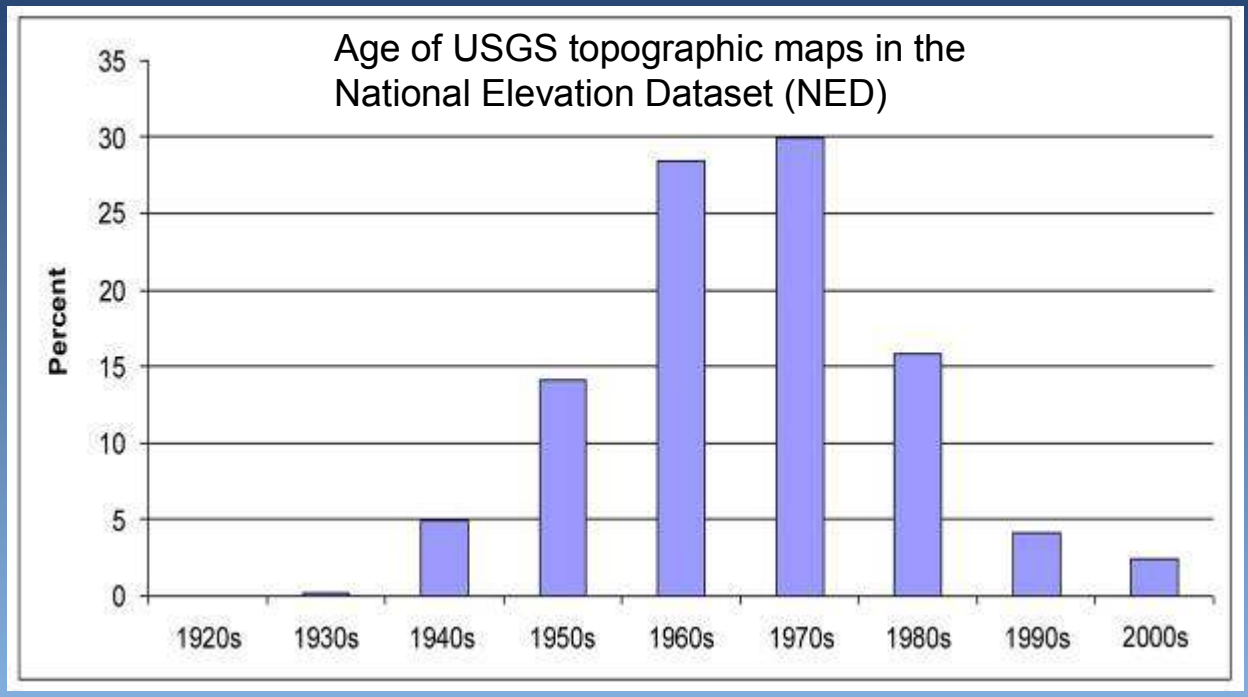
Free Executive Summary

Base Map Inputs for Floodplain Mapping

Committee on Floodplain Mapping Technologies,
National Research Council

ISBN: 978-0-309-10409-8, 186 pages, 6 x 9, paperback (2007)

Elevation for the Nation



- Terrain data in USGS topographic maps are on average 35 years old and flood mapping requires data that are either collected or considered for updating within the last 7 years.
- The root mean square error (RMSE) of the terrain data in the NED is 2.34 m (7.7 ft) and FEMA's requirements for flood plain mapping are for data with RMSE of 18.5 cm (0.61 ft) or 2 ft equivalent contour accuracy in flat areas and 37 cm (1.22 ft) or 4 ft equivalent contour accuracy in rolling or hilly areas.
- Existing data are thus ~ 1/10 accuracy and about 5 times older than needed for the flood mapping task.

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Summary

- The committee concludes that the nation's base map information for land surface elevation is inadequate to support FEMA's Flood Map Modernization needs and that a new program called *Elevation for the Nation* is needed.

- We recommend lidar data with 1-ft equivalent contour accuracy in very flat coastal or inland floodplains; 4-ft equivalent contour accuracy in mountainous terrain; and 2-ft equivalent contour accuracy in most other areas.

- The *Elevation for the Nation* database should contain the original lidar mass points , edited bare-earth surface, and breaklines required to define essential linear features.

- A seamless nationwide elevation model, with applications beyond FEMA Map Modernization, should be disseminated to the public as part of an updated National Elevation Dataset.

- Comprehensive standards for lidar data collection and processing are also needed. Funding to support these efforts should be considered as part of a nationwide effort.

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NED Home / info - http://ned.usgs.gov/

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National Center for Earth Resources Observation and Science (EROS)

National Elevation Dataset | Background | Data | Applications | Research | Publications | FAQs | Contact Us

The USGS National Elevation Dataset (NED) has been developed by merging the highest-resolution, best quality elevation data available across the United States into a seamless raster format. NED is the result of the maturation of the USGS effort to provide 1:24,000-scale Digital Elevation Model (DEM) data for the conterminous US and 1:63,360-scale DEM data for Alaska. The dataset provides seamless coverage of the United States, HI, AK, and the island territories. NED has a consistent projection (Geographic), resolution (1 arc second), and elevation units (meters). The horizontal datum is NAD83, except for AK, which is NAD27. The vertical datum is NAVD88, except for AK, which is NAVD29. NED is a living dataset that is updated bimonthly to incorporate the "best available" DEM data. As more 1/3 arc second (10m) data covers the US, then this will also be a seamless dataset.

The Seamless Data Distribution System (SDDS) offers seamless data for a user-defined area, in a variety of formats, for online download or media delivery.

U.S. Department of the Interior | U.S. Geological Survey
National Center for Earth Resources Observation and Science (EROS)

NHD home page

USGS: National Hydrography Dataset - Microsoft Internet Explorer

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National Hydrography Dataset

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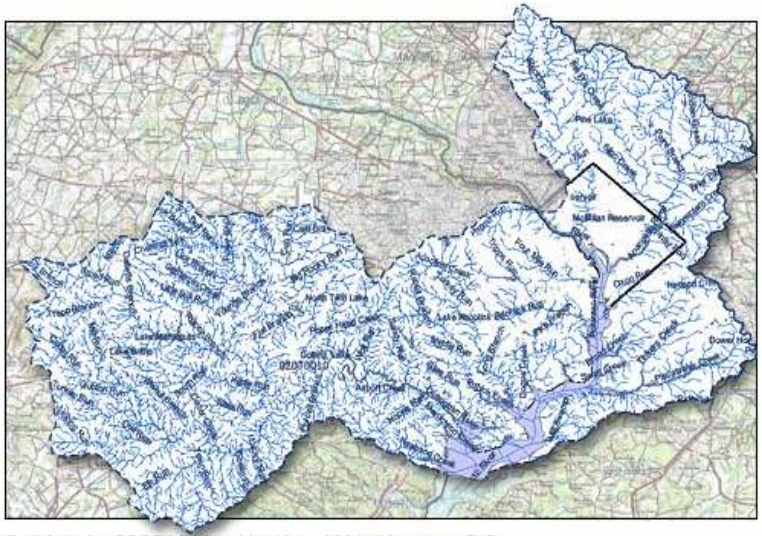
National Hydrography Dataset



Subbasin 02070010 covering Washington DC

The National Hydrography Dataset (NHD) is a comprehensive set of digital spatial data that contains information about surface water features such as lakes, ponds, streams, rivers, springs and wells. Within the NHD, surface water features are combined to form "reaches," which provide the framework for linking water-related data to the NHD surface water drainage network. These linkages enable the analysis and display of these water-related data in upstream and downstream order.

The NHD is based upon the content of USGS Digital Line Graph (DLG) hydrography data integrated with reach-related information from the EPA Reach File Version 3 (RF3). The NHD supersedes DLG and RF3 by incorporating them, not by replacing them. Users of DLG or RF3 will find the National Hydrography Dataset both familiar and greatly expanded and refined.

While initially based on 1:100,000-scale data, the NHD is designed to incorporate and encourage the development of higher resolution data required by many users.

NHD NEWS

NHDinGEO Information

Interested in NHDPlus?
June 2007

National NHD Stewardship Conference summary and PowerPoint presentations
- Denver, CO April 24-26 2007

See the latest NHD Newsletter and the High Resolution Production Status Map.

USFS Reprojection Tool Version 1.3.1 (updated).
May 2007

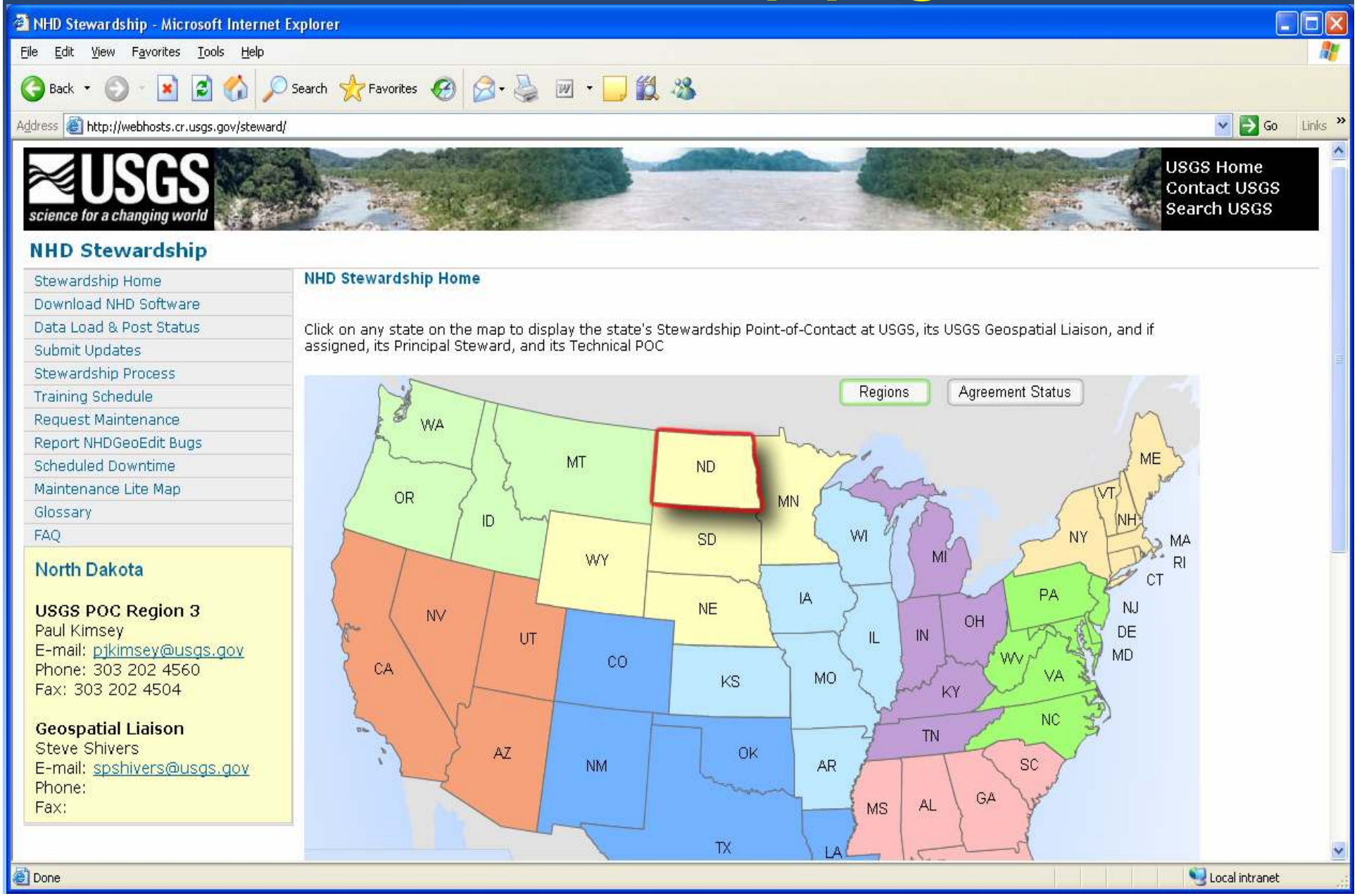
NHDinGEO FCodes by layer now available.
October 2006

To access the Geographic Names Information System (GNIS) to check, submit new, or make changes to names in GNIS, go to our GNIS Information page.

Upcoming NHD Training, Workshops, and Conference Presentations

Done Local intranet

NHD Stewardship page



Seamless Data Distribution System
http://seamless.usgs.gov/

GISDATA Map Studio - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://gisdata.usgs.gov/

Go Links

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USGS Home
Contact USGS
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USGS Earth Resources Observation and Science (EROS)

GISDATA Map Studio - Home Page

- News & Announcements
- Interactive Maps
- Data Delivery
- Map Services
- Extract Services
- Web Services
- Viewer Templates
- Links
- Information Sheets
- FAQ
- RSS Feed

- Afghanistan
- Disaster Response
- Drought Monitoring
- EDNA
- Integrated Vegetation Mapping (IVM)
- Kentucky
- KidsViewer
- Lincoln Pilot
- Map Studio Viewer
- MRLC
- New Jersey
- Orthoimagery
- Tampa Bay CUES
- Topobathy
- ARMI
- Border Health
- Mopex
- Landfire
- CEOS
- LIDAR

GISDATA Messages

Resources Observation and Science (EROS) by the USGS. Here you will find public web map services, and interfaces developed at the center. Many of the n the Geography Network, and some national services are cohosted by ESRI. (Read more)

Help

GISDATA Articles and News

ty
:00:00

ss site, map, and webservices are available.

ess:
:22:19

irst responders and emergency services working in the aftermath of Hurricane Katrina. In cooperation with FEMA, or all aerial, satellite and ground information on areas struck by Katrina. Pre- and post-hurricane imagery have been s commercial, international, and federal data sources. To access Hurricane Katrina information and data. Click trina)

rthoimagery.
:00:00

hoimagery now available for Boise,ID-Greensboro,NC-Jacksonville,FL 0.3m-Las Vegas, NV-Los Angeles,CA Bernardino,CA 0.3m-Sacramento Delta,CA-San Diego,CA 0.3m-San Francisco,CA 0.3m-San Juan, PR on the ibution System. More

More NED 1/3 Arc Second Data Available

Posted by **USGS Admin** on 2004-02-17 02:00:11

A new area for NED 1/3 Arc Second data has been added to SDDS. The new areas are pieces across the United States. To see what areas are available follow steps listed below. More

1/9 Arc Second NED available for limited areas.

Posted by **USGS Admin** on 2003-10-17 03:41:08

USGS is now offering seamless National Elevation Dataset (NED) in 1/9 Arc Second resolution. This NED raster product is produced using Light Detection and Ranging (LIDAR) source data. More

Internet

GNIS – Geographic Names Information System
http://geonames.usgs.gov/

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USGS Home
Contact USGS
Search USGS

U.S. Board on Geographic Names

Domestic Names - Main

Main Menu
- BGN Home
- **Domestic Names**
  - Search GNIS (includes FIPS55)
  - Download GNIS (includes FIPS55)
  - Principles, Policies, and Procedures
  - Minutes
  - Quarterly Review List
  - Propose or Change a Name
  - Compilation Status Map
  - FAQs
- Foreign Names
- Antarctic Names
- Undersea Features
- Member Directory
- Links

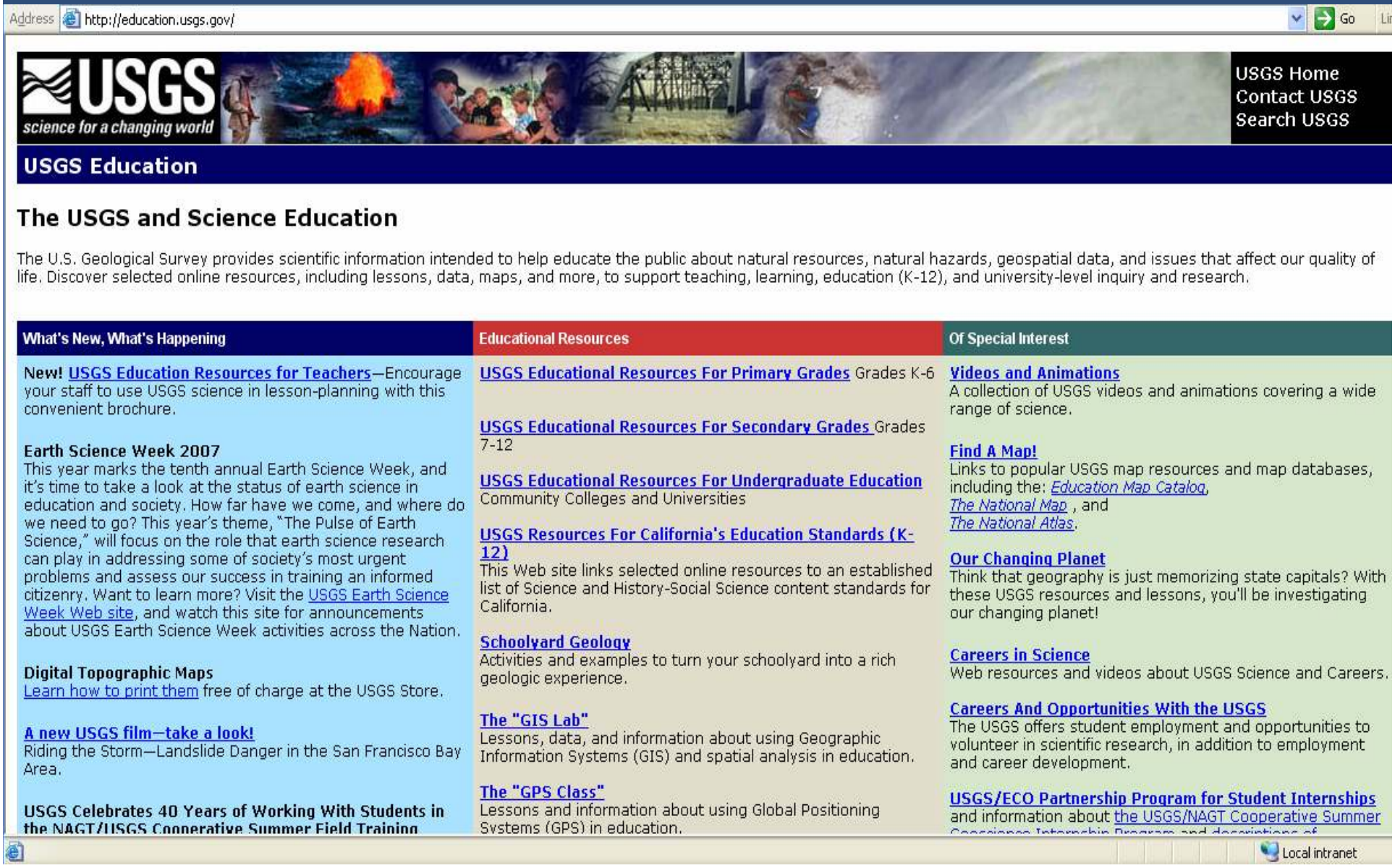
The Geographic Names Information System (GNIS) is the Federal standard for geographic nomenclature. The U.S. Geological Survey developed the GNIS for the U.S. Board on Geographic Names as the official repository of domestic geographic names data; the official vehicle for geographic names use by all departments of the Federal Government; and the source for applying geographic names to Federal electronic and printed products.

The GNIS contains information about physical and cultural geographic features of all types in the United States, associated areas, and Antarctica, current and historical, but not including roads and highways. The database holds the Federally recognized name of each feature and defines the feature location by state, county, USGS topographic map, and geographic coordinates. Other attributes include names or spellings other than the official name, feature designations, feature classification, historical and descriptive information, and for some categories the geometric boundaries.

The database assigns a unique, permanent feature identifier, the Feature ID, as *the only* standard Federal key for accessing, integrating, or reconciling feature data from multiple data sets. The GNIS collects data from a broad program of partnerships with Federal, State, and local government agencies and other authorized contributors, and provides data to all levels of government, to the public, and to numerous applications through a web query site, web map and feature services, file download services, and customized files upon request.

For additional information on the GNIS and related web map and feature services, see the text version of the GNIS Metadata or the Geographic Names Community in Geospatial One-Stop. To search or download files from the GNIS, click the respective link in the menu on the left. Communications concerning the Geographic Names Information System should be addressed to gnis_manager@usgs.gov.

http://education.usgs.gov/



Earth Science Week October 14-20, 2007

USGS ESW Home

Director's Message

USGS Activities in Your State

The USGS and Science Education

Presidential Proclamation

Celebrate Earth Science Week, October 14-20, 2007

"The Pulse of Earth Science" is this year's theme for Earth Science Week (ESW), an annual event sponsored by the American Geological Institute (AGI) and its member organization.

Science Week Toolkits

- USGS Education Resources for Teachers -- A compendium of USGS Web sites selected to support classroom instruction and student research.
- International Polar Year: Science at the Ends of the Earth -- Information about the research being conducted to understand polar change and assess its effects on Earth's ecosystems and people.
- Landsat Image Mosaic of Antarctica (LIMA) -- An introduction to the LIMA project that will allow citizens, for the first time, to access seamless high resolution imagery of the entire Antarctic continent; available in four useful formats.
- Facts on Disc -- A full-text, searchable database of all recent USGS Fact Sheets, including high resolution images and a wide range of topics, in a convenient DVD format. The entire toolkit package can be ordered through AGI's Science Week Toolkits.

Previous activities: 2006 Earth Science Week

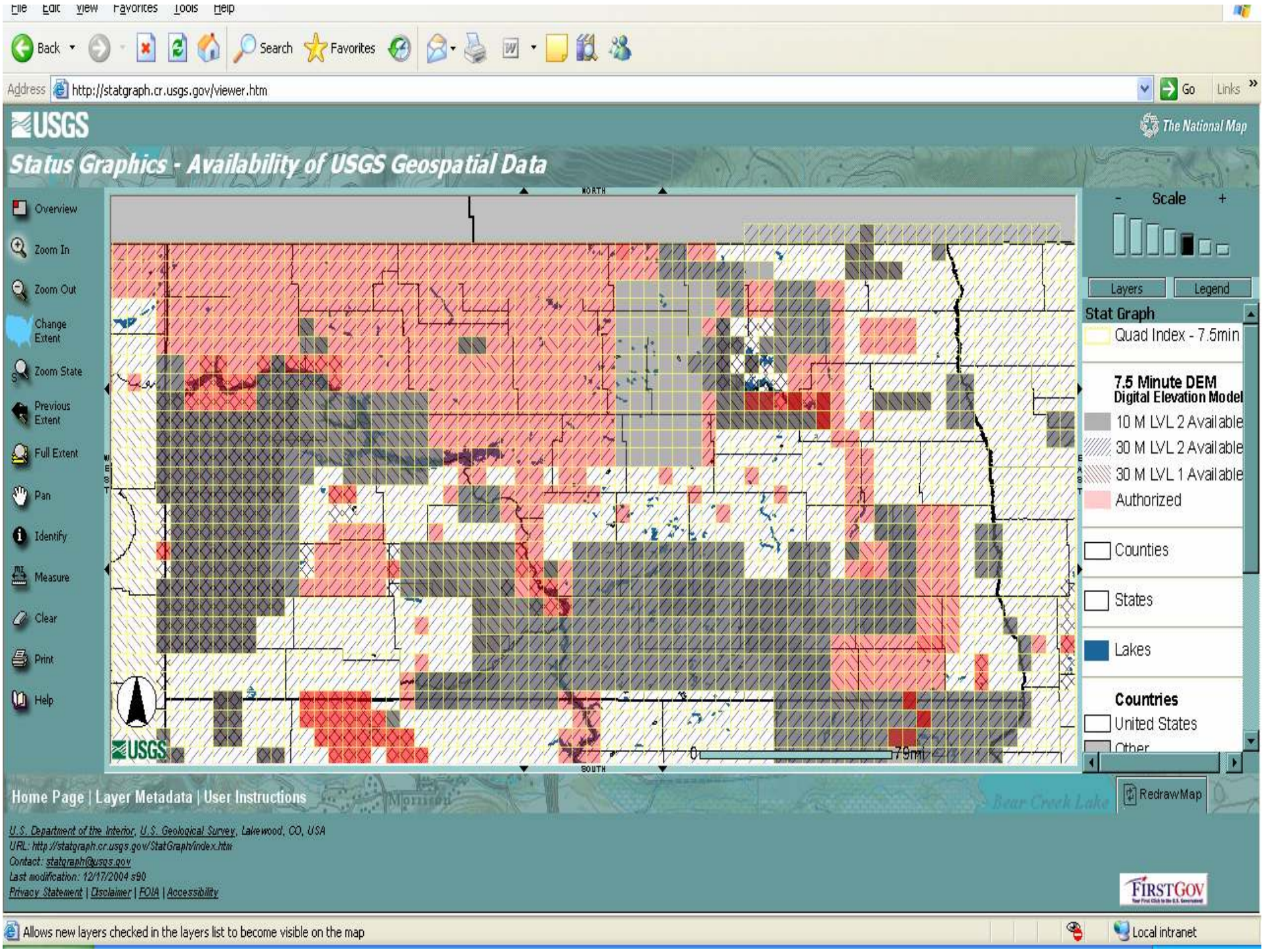
Check back often as additional information becomes available.

Some documents on this page may require Acrobat Reader.

USGS activities in North Dakota

- USGS Assistance Grant to ITD
  - Improved services for ND GIS Hub
- Red River Basin Mapping Initiative
  - Elevation / Orthoimagery data
- Digital Elevation Data (DEM) production
  - Federal partners, USGS contract mechanism
- National Hydrography Dataset (NHD)
  - Stewardship partners, GNIS maintenance

USGS


File Edit View Favorites Tools Help
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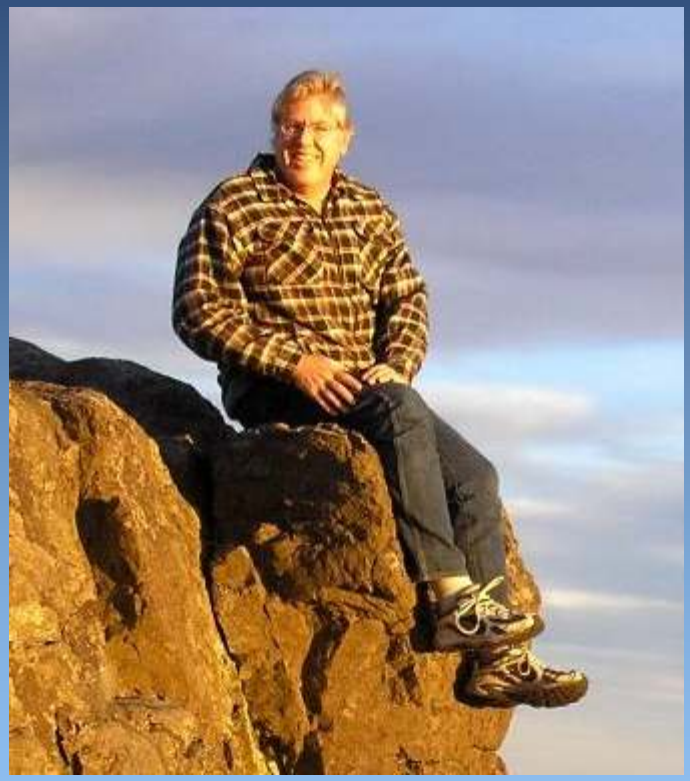
Address http://statgraph.cr.usgs.gov/viewer.htm
Go Links
USGS
The National Map
Status Graphics - Availability of USGS Geospatial Data
Overview
Zoom In
Zoom Out
Change Extent
Zoom State
Previous Extent
Full Extent
Pan
Identify
Measure
Clear
Print
Help
NORTH
WEST
EAST
SOUTH
USGS
0
79mi
Scale
Layers
Legend
Stat Graph
Quad Index - 7.5min
7.5 Minute DEM
Digital Elevation Model
10 M LVL 2 Available
30 M LVL 2 Available
30 M LVL 1 Available
Authorized
Counties
States
Lakes
Countries
United States
Other
Home Page | Layer Metadata | User Instructions
RedrawMap
U.S. Department of the Interior, U.S. Geological Survey, Lakewood, CO, USA
URL: http://statgraph.cr.usgs.gov/StatGraph/index.htm
Contact: statgraph@usgs.gov
Last modification: 12/17/2004 s90
Privacy Statement | Disclaimer | FOIA | Accessibility
FIRSTGOV
Allows new layers checked in the layers list to become visible on the map
Local intranet

New "Dakota Liaison"

- **Steve Shivers**
  - Office location – Rapid City, SD
  - Background:
    - USGS experience – 20+ years
    - Natural Science Network
      Alaska to Washington, DC
    - Data distribution
    - Web applications
  - Transition – fall 2007



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National Geospatial Program Office

Razorback saying: "Create it once – use it a bunch!"

Questions?

Ron Wencl

rwencl@usgs.gov

763-783-3207

EarthNow – http://earthnow.usgs.gov